

**Claims Currently Pending in US Patent Application No. 09/464,099**

100. An antibody immunoreactive with a 5-enolpyruvylshikimate-3-phosphate synthase enzyme, said enzyme comprising the sequence domains:
- R-X<sub>1</sub>-H-X<sub>2</sub>-E- (SEQ ID NO:37), in which
    - X<sub>1</sub> is G, S, T, C, Y, N, Q, D or E;
    - X<sub>2</sub> is S or T; and
  - G-D-K-X<sub>3</sub>- (SEQ ID NO:38), in which
    - X<sub>3</sub> is S or T; and
  - S-A-Q-X<sub>4</sub>-K- (SEQ ID NO:39), in which
    - X<sub>4</sub> is A, R, N, D, C, Q, E, G, H, I, L, K, M, F, P, S, T, W, Y or V; and
  - N-X<sub>5</sub>-T-R- (SEQ ID NO:40), in which
    - X<sub>5</sub> is A, R, N, D, C, Q, E, G, H, I, L, K, M, F, P, S, T, W, Y or V.
101. The antibody of claim 100, wherein X<sub>1</sub> is D or N; X<sub>2</sub> is S or T; X<sub>3</sub> is S or T; X<sub>4</sub> is V, I or L; and X<sub>5</sub> is P or Q.
102. The antibody of claim 100, wherein the enzyme comprises SEQ ID NO:3.
103. The antibody of claim 100, further defined as a polyclonal antibody.
104. The antibody of claim 100, further defined as a monoclonal antibody.
107. A kit for the detection of a 5-enolpyruvylshikimate-3-phosphate synthase enzyme in a sample, said kit comprising:
- a container comprising an antibody immunoreactive with SEQ ID NO:3; and
  - a detection agent.